



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,170	01/18/2002	Masahiro Kanda	020066	7598

23850 7590 08/11/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/050,170	Applicant(s) KANDA, MASAHIRO	
	Examiner Chau N Nguyen	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Larson (3,555,171).

Larson discloses a rubber stopper used in a waterproof connector, the rubber stopper being disposed between a covered cable (11) and a connector housing (G) of the waterproof connector, wherein the rubber stopper includes a composition that is not the same as the composition of the covering layer of the covered cable (Larson, col. 1, lines 68-71 and col. 3, lines 10-17, the covering layer 11 being made of PVC or polyethylene and the rubber stopper being made of butyl rubber). Noted that since the composition of the rubber stopper is not the same as the composition of the covering layer as claimed in claim 1, the material of the rubber stopper can bond to the covering layer of the covered cable when the rubber stopper is heated.

Re claim 4, the recitation of " a heating temperature during the heating is higher than a temperature at which the rubber stopper is assembled in the connector" being considered method limitations. It has been held that during examination, the patentability of a product-by-process claim is determined by the novelty and nonobviousness of the claimed product itself without consideration of the process for making it which is recited in the claim. In re Thorpe, 227 USPQ 964.

Re claim 9, the rubber stopper of Larson is bonded to the covering layer of the covered cable when the rubber stopper is heated by an environmental air surrounding the connector during a using state of the connector since the rubber stopper and the covering layer of Larson comprise different compositions as claimed in the claimed invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson in view of Wada (4,517,332).

Larson discloses the invention substantially as claimed including the covering layer comprising PVC (re claim 12). Larson does not disclose a rubber composition containing an organic rubber as a major constituent and a di-2-ethylhexyl phthalate.

Wada discloses a rubber composition containing an organic rubber as a major constituent and a di-2-ethylhexyl phthalate (col. 3, lines 47-48) (re claims 2 and 5). It would have been obvious to one skilled in the art to use the rubber composition as taught by Wada for the stopper of Larson since the rubber composition taught by Wada has an excellent non-tackiness such that it can be easily handling during the connection process.

5. Claims 3, 7, 8, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson in view of Wada as applied to claim 1 above, and further in view of Yoshino (5,519,082).

The combination of Larson and Wada discloses the invention substantially as claimed including the covering layer of the covered cable comprising PVC (re claim 13). The combination does not disclose the rubber including a silicon rubber

as a major constituent and a bonding agent which is at least one of silylidyne groups. Yoshino discloses a silicone rubber composition including a compound comprising at least one of silylidyne groups (see abstract). It would have been obvious to one skilled in the art to use the rubber composition as taught by Yoshino for the stopper of Larson since the rubber composition of Yoshino is improved in hardness, modulus and tear strength (re claims 3, 7 and 8). Re claim 10, the modified rubber stopper of Larson is bonded to the covering layer of the covered cable when the rubber stopper is heated by an environmental air surrounding the connector during a using state of the connector since the modified rubber stopper and the covering layer of Larson comprise different compositions as claimed in the claimed invention.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 5 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831